

IN THE CLAIMS

Please amend the claims as follows:

1-24. (Cancelled)

25. (New) An encoding method for adaptively carrying out field-based or frame-based encoding processing at a macroblock level with image information as an input, the encoding method comprising:

a first generation step of generating a context model corresponding to a frame/field flag indicating whether the encoding processing at the macroblock level is field-based or frame-based;

a second generation step of generating a context model corresponding to a syntax element for carrying out the frame-based or the field-based encoding processing, wherein the context model corresponding to motion vector information of a current macroblock is generated based on a sum of an absolute value of motion vector information of macroblocks neighboring the current macroblock, and if the current macroblock is subjected to the field-based encoding and a neighboring macroblock is subjected to frame-based encoding, the motion vector information corresponding to the neighboring macroblock is calculated by converting the vertical component of the motion vector information corresponding to the neighboring macroblock to the equivalent for field-based encoding and is applied to the context model corresponding to the motion vector information of the current macroblock; and

an encoding step of carrying out the encoding processing using the context model corresponding to the motion vector information of the current macroblock generated in the second generation step.

26. (New) An encoding apparatus for adaptively carrying out field-based or frame-based encoding processing at a macroblock level with image information as an input, the encoding apparatus comprising:

means for generating a context model corresponding to a frame/field flag indicating whether the encoding processing at the macroblock level is field-based or frame-based;

means for generating a context model corresponding to a syntax element for carrying out the frame-based or the field-based encoding processing, wherein the context model corresponding to motion vector information of a current macroblock is generated based on a sum of an absolute value of motion vector information of macroblocks neighboring the current macroblock, and if the current macroblock is subjected to the field-based encoding and a neighboring macroblock is subjected to frame-based encoding, the motion vector information corresponding to the neighboring macroblock is calculated by converting the vertical component of the motion vector information corresponding to the neighboring macroblock to the equivalent for field-based encoding and is applied to the context model corresponding to the motion vector information of the current macroblock; and

means for carrying out the encoding processing using the context model corresponding to the motion vector information of the current macroblock generated by the means for generating a context model corresponding to the syntax element.